Construct an overflow spillway outlet, on natural ground, one foot above riser pipe. Plate overflow spillway with erosion control stone Class B as specified in the plans.

Stabilize the embankment and surrounding areas with vegetation after installation. Construct energy dissipater pad at the barrel pipe outlet with erosion control stone Class B in accordance with the *Roadway Standard Drawings* No. 1630.01 and 1630.02.

1637-4 MAINTENANCE AND REMOVAL

Place a marker in the basin indicating the 50% volume level. Clean out riser basin when sediment volume reaches 50% of the storage volume in accordance with Section 1630.

Remove riser basin devices as the project nears completion or as directed. Prepare a seed bed, seed and mulch the area in accordance with Section 1660 after removal of the riser basin.

1637-5 MEASUREMENT AND PAYMENT

C.S. Pipe Tee Riser, __" Thick will be measured and paid in units of each installed and accepted. Such price shall include furnishing and installing any additional pipe required for correct riser height, the trash rack and the anti-flotation device.

Stone for Erosion Control, Class B will be measured and paid in accordance with Section 1610.

Outlet Pipe will be measured and paid in accordance with Section 310.

Silt Excavation will be measured and paid in accordance with Section 1630.

Coir Fiber Baffle will be measured and paid in accordance with Section 1640.

Payment will not be made for any work performed under this section that is solely for the convenience of the Contractor or that is made necessary due to negligence of the Contractor.

Payment will be made under:

Pay Item	Pay Unit
__" x __" x __" C.S. Pipe Tee Riser, __" Thick	Each

SECTION 1638
STILLING BASIN

1638-1 DESCRIPTION

Construct, maintain and remove earth embankments used to trap sediment from dewatering construction sites during construction of drilled piers, footing excavation or culvert construction. Work includes providing permeable stone drain, cleaning out, maintaining, removing and disposing of the stilling basins and all components and reshaping the area.

The actual conditions that occur during the construction of the project will determine the quantity of stilling basins constructed. The quantity of stilling basins may be increased, decreased or eliminated entirely as directed. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

1638-2 MATERIALS

Use suitable excavated materials, as specified in Sections 225, 230 and 240, in the construction of earth embankments for stilling basins, except where otherwise specified.

Refer to Division 10.

Item	Section
Stone for Erosion Control, Class A or Class B	1042-1
Sediment Control Stone, Standard Size No. 5 or 57	1005

Item	Section
Coir Fiber Mat	1060-14

1638-3 CONSTRUCTION METHODS

Construct stilling basins at the locations shown in the plans and at other locations as directed.

Construct earth embankment with a permeable stone drain in a rectangular form adjacent to the stream and culvert following the applicable requirements of Section 235. The maximum height allowed for earth dikes is 5 ft. Excavate below the natural ground for greater depths of basins.

Install coir fiber baffles in accordance with Section 1640 and as directed.

1638-4 MAINTENANCE AND REMOVAL

Maintain the stilling basins, coir fiber baffles and remove and dispose of silt accumulations at the stilling basins in accordance with Section 1630.

Remove the stilling basins as the project nears completion, or at such time the Engineer deems the device to be no longer useful. Prepare a seed bed and seed and mulch the area after removal of the stilling basin in accordance with Section 1660.

1638-5 MEASUREMENT AND PAYMENT

Stilling Basin quantities will be measured and paid in cubic yards, in place and computed by the average-end-method for the actual number of cubic yards of basin capacity. The measurements will be the internal measurements of the basin measured up to the top of the permeable stone drain. Materials used to construct the basin that originates from another payment item (i.e. unclassified excavation, borrow excavation) will not be deducted from the volume of that original pay item.

Stone for Erosion Control, Class ____ will be measured and paid in accordance with Section 1610.

Sediment Control Stone will be measured and paid in accordance with Section 1610.

Coir Fiber Baffle will be measured and paid in accordance with Section 1640.

Payment will be made under:

Pay Item	Pay Unit
Stilling Basins	Cubic Yard

SECTION 1639
SPECIAL STILLING BASIN

1639-1 DESCRIPTION

Furnish, place and remove special stilling basins as directed. The special stilling basin can be used to filter pumped water during construction of drilled piers, footing excavation or culvert construction. The special stilling basin can be used for sediment storage at the outlet of temporary slope drain pipes.

1639-2 MATERIALS

Refer to Division 10.

Item	Section
Geotextile for Drainage, Type 2	1056
Sediment Control Stone, Standard Size No. 5 or 57	1005

Use geotextile and sediment control stone that is clean and without debris.